

**G-20Y**  
Summit

We design **our world**



# **G-20Y Summit 2018**

## **Final Perspectives**

10-14 October 2018  
Evian, France

There are a few places in the world where the future is being built.

The G-20Y Summit is one of them.

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## ABOUT G-20Y ASSOCIATION AND G-20Y SUMMITS

The 9th G-20Y Summit took place in Evian, France from October 10 to 14, 2018.

The G-20Y Association is an inspiring, independent and innovative platform for a new generation of business leaders addressing the biggest challenges of our times to shape a better future.

The G-20Y Association organizes G-20Y Summit each year to bring together a select group of executives from 20 of the major economies worldwide to engage in meaningful dialogue and co-creation, building a strong network of executives across industries and geographies.

In 2018 the G-20Y Summit overarching theme is dedicated to Emerging Technology and Digital Transformation: Enable Growth in Present & Future.

G-20Y Association unites the efforts and developments of traditional market players and unprecedented market disrupters to collaboratively address the challenges in the disruptive digital era as well as to rethink current business models and redesign our world using collaborative ideas for joint business or social projects.

G-20Y Association believes that we're at a critical time in the global economy. Emerging technology (3D printing, solar power technology, artificial intelligence and machine learning, robotics, big data, block chain and cryptocurrencies, internet of things and autonomous vehicles, virtual and augmented reality, nano technology, gene editing, mobile technology and etc.) is transforming industries, sector lines are blurring, and global institutions are being forced to work in interconnected ways.

During the G-20Y Summit, the executives participated in meaningful discussions and exchange of best practises in different committees and subsequently develop their perspectives:

I. The Energy Markets Committee

II. The Banking Committee

III. The Insurance Committee

IV. The Emerging Technologies Committee

V. The Future of Jobs Committee

The companies that have participated at G-20Y Summits from 2010 to 2018 are: HSBC Holdings, MasterCard, Statoil, Société Generale Group, PepsiCo, Credit Suisse, McKinsey, London Stock Exchange Group, Marriott, ORIX Corporation, FedEx, KPMG, Nestle, ING Group, Eni, Rolls-Royce, Insurance Australia Group, Generali Group, Siemens, Prudential Financial, Total, Intesa Sanpaolo, Airbus, Standard Bank Group, E.ON, Bosch, Bayer AG, EDF, Zurich Insurance Group, PwC, Lufthansa, Enel, Philips, Deutsche Bank AG, Royal DSM, Swiss Re, Unilever, Munich Re, Lafarge, Nordea Bank, Daimler, GDF Suez, Schneider Electric, Danone, SAP, Bank of America, ATOS, BT Group and more. The list of participants also includes senior official representatives of national and regional governmental organisations.

## G-20Y SUMMIT FINAL PERSPECTIVES 2018

We, the young business and financial leaders of the G20 countries, gathered in Evian, France, for the 9th annual meeting of the G-20Y Summit on October 10-14, 2018, with an overall view to strengthen international cooperation between business and financial leaders and to find innovative ideas towards sustainable prosperity on a mid- to long-term perspective.

As a result of three days and 5 formal sessions of discussions, we, the young business and financial leaders, have assembled a set of perspectives on the the following topics on the G-20Y agenda, namely:

- I. Energy Markets Committee
- II. Banking Committee
- III. Insurance Committee
- IV. Emerging Technologies Committee
- V. Future of Jobs Committee

The G-20Y business community adds value and contributes by raising fresh thinking and capturing the attention of the relevant leaders to identified questions in order to inspire them to create a better future.

**DISCLAIMER: THE PRESENT PERSPECTIVES ONLY REFLECT THE VIEWS AND RECOMMENDATIONS OF THE G-20Y SUMMIT PARTICIPANTS THEMSELVES, NOT THOSE OF THEIR COMPANIES OR EMPLOYERS.**

**THE VIEWS AND PERSPECTIVES ON THE SEVEN TOPICS ARE THOSE OF THE COMMITTEES WORKING ON EACH OF THESE TOPICS. THEY DO NOT NECESSARILY REFLECT THE POSITION OF ALL OF THE G-20Y SUMMIT PARTICIPANTS.**

## **G-20Y SUMMIT 2018**

### **ENERGY MARKETS COMMITTEE – FINAL PERSPECTIVES**

Emerging technologies and digital transformation are important agents of change, impact and challenge along the full energy value chain. There are many emerging technologies but digitalization is probably the biggest catalyzer of change. Some of the main tools include big data, blockchain, internet of things, artificial intelligence, drones and virtual reality.

Energy brings a trilemma of expectations in order to meet the public good: sustainability; affordability; and reliability. This requires striking an optimal balance acceptable to the community. Digitalization becomes an imperative as it assists in addressing this trilemma.

The traditional product is being customised through the availability of large data as well as transformed in a service or bundled with other products and services (energy audits, appliances, insurance and financing). Digitalization is enabling the emergence of new business models, which are challenging the traditional ones. Empowered by the digital revolutions, users are finding new ways of experiencing energy delivered to them. Examples include microgeneration and storage and community based P2P trading.

The cultural dimension of the transformation taking place is often underestimated as well as the pace of change. A number of different actors across the full value chain are living through the new technological and digital revolution including users, community, employees, business partners, and policy makers.

The multiple drivers accelerating the digital transformation in the energy sector are making the cultural dimension even more challenging. The industry players are at different stages of transformation from being skeptical, being curious to embracing and implementing actions. The challenge also becomes the balance between replacing/outsourcing and retraining. Finding the right balance between knowledge, wisdom, soft skills (empathy) is paramount to success.

On the production side, the technical background of the workforce has affinities with the digital revolution in terms of competence. The challenge is opening the mentality and bringing a culture of change in a sector that has a strong legacy culture. Getting people to rethink the way they work and trust the new technology by demonstrating the long term benefits of adopting digitalization, in particular AI and automation. Part of it includes to what extent processes should be automated without jeopardising safety. On the sales side the cultural challenge is in the radical evolution of the offering which requires a more customer centric approach and increased business collaboration or partnership. This requires the development of new softer skills.

The quick rate of change but also the cost structure of the new assets is changing drastically the way they are financed. Large companies and financial institutions need to manage investment in assets which may rapidly become obsolete. Investors need to learn to assess investments in digital technologies producing benefits often hard to quantify and monitor. Large financial institutions are struggling to finance at scale the investments in new business models, digitalization and innovation needed because of the lack of culture, frameworks, and data. It is a methodological as well as an informational challenge. In time digitalization will provide increasing amounts of data and statistics to support investments provided it is used effectively. Meanwhile, venture capital is ready to finance disruption characterised by higher levels of uncertainty and greater opportunity.

Digitalisation will also open new channels for financing disruption. Crowd funding will drive community level investments. The bundling of energy with other products such as big data or environmental attributes will bring in new revenue streams to financing. The value of the data associated with energy consumption could provide new streams or attract outsiders into the market.

Emerging technologies and digitalization are increasingly offering important opportunities in the energy sector. The benefits of their increased penetration include: economic growth in terms of reduced costs, improved

efficiency, new goods and services; enhanced customer experience through an increasingly customized way of experiencing energy; resilience to external shocks ranging from extreme weather events, geopolitical disruption, and economic cycles.

Important challenges lie ahead requiring close cooperation among all actors involved. The challenges faced can be very different and include:

- Sustainability in terms of the environmental impact of digitalization (electronic waste) as well as energy consumption growing fast.
- Social equity issues are arising where some of the cost reductions of digitalization may be enjoyed by higher income households (especially because of the higher up-front costs) whereas lower income households are left behind. Greater care is required to ensure universal access.
- Cybersecurity and data abuse where new technologies used for existing services but also for creating new services can be used inappropriately. The consequences can range from simple fraud, to data theft, to risks for the health and safety of energy users, and service disruption.
- Regulation striking the right balance between central planning approach and a more “laissez faire” market driven strategy. Policy needs to take a long term view especially with respect to issues such as energy security, infrastructure, and standardization. In addition policy must be mindful that cross sectorial integration is becoming challenging as emerging technologies such as batteries will have cross-sectorial impacts for instance in transport, electricity and ICT sectors.

Setting the course of action for private sector operators will not be easy. Predicting technological and cultural change will become increasingly challenging in such a rapidly evolving environment. Decisions will need to be made in terms of:

- Attracting and/or retaining the right skills as well as constantly retraining the workforce to adapt it to a changing environment. Full engagement of the workforce and its smooth transition should be the priority of board members to avoid resistance to change. Continuous learning and education should also be ensured.
- Finding the balance between diversification and developing business partnerships is important, as this would allow companies to effectively and efficiently navigate across sectors and optimize the full value chain of the goods and services they provide. Partnerships also need to span horizontally across sectors.
- Engaging with the community and policy makers through this journey is important to ensure understanding of the potential that can be achieved, and creating a shared vision.



## **G-20Y SUMMIT 2018**

### **BANKING COMMITTEE – FINAL PERSPECTIVES**

#### **Changing Landscape**

- Data has traditionally been a competitive advantage for Financial Institutions (“FI”). The availability of large amounts of data (and sources) particularly exploited by technology companies is challenging the status quo of this competitive advantage FI have enjoyed;
- FI have not maximised the value of this data (either by choice or regulation) to date. Effective use of data is considered critical to future business models - FI should structure processes around maximising data usage so they maintain their competitive advantage and improve individual client outcomes;
- Big Data, Machine Learning, and Artificial intelligence (“AI”) should be used by FI as it is transforming the sector, enabling FI to streamline costs, offer smarter solutions and broaden their reach as well as win new client groups through interpreting client behavioural patterns. Embracing this technology is considered critical to the ongoing success of the industry;
- Such transformation will require substantial investment in a flexible IT infrastructure to support rapid adaptation that can’t be built efficiently on the established mainframe infrastructure;
- To support client-centricity in developing ideas, FI must implement innovation communities by leveraging FinTech and other partners. FI should also consider targeting Minimum Viable Products (“MVP”) rather than mature products when they assess their needs for future investment;
- Digital transformation is critical for the FI industry, as it will drive future strategic direction of FI and the broader industry. This needs to be driven by Senior Management and Decision Makers as part of refocused corporate culture.

#### **Competition vs Cooperation**

- The general framework to act in the FI services sector needs to include all required market participants, independent of their background (current regulated banks as well as non-banks (disruptors, FinTechs, hedge funds, shadow banks etc)) to create and ensure a level playing field;
- FI are critical to any well-functioning economy, facilitating growth in the real economy and a social function that needs to be protected;
- Post the Global Financial Crisis FI have been subject to tightening regulation, which has increased complexity, tied up significant capacity and led to increased costs in the system. In parallel alternative providers of FI services have emerged largely unregulated and therefore have a relative advantage (cost and regulatory);
- A more balanced and commensurate regulation between non-bank financial institutions and classical FI is needed in order to mitigate potential systemic risk and not unduly disadvantage FI;
- One potential and effective way of achieving this level playing field would be to have regulatory measures linked to products. Horizontal product and service related regulation would affect all market participants to a similar extent;
- This would assist in creating a harmonised eco-system allowing market participants to leverage their relative competencies for the benefit of more efficient and sustainable financial system. This should be beneficial for clients as it allows developing future-oriented solutions.

#### **Human Challenge**

- The banking systems is facing unprecedented technological change and radical transformation therefore, strategies, governance bodies, organizational structure, skills, technological capabilities and other basic critical issues should adapt to future client needs as well as new value propositions.
- This affects not only clients but also broader society, including FI employees;
- Our clients are becoming more financially and technologically literate. FI employees need to respond to this changing landscape. A change in cultural and skill base is required and FI need to support this change;





- Entrepreneurial competencies, digital natives and tech talents should be critical within the required skills structure;
- The FI of the future will require personnel equipped to drive digital innovation and flexible in adjusting to new processes and automated procedures;
- Early technological education in school together with financial literacy becomes a key prerequisite to successfully operate in this future landscape. Therefore, it will benefit not only the long-term availability of talent in the industry but also financial inclusion, foster trust in the technology, and educate clients about the products, services, providers and inherent risks as a part of FI corporate social responsibility.

**G-20Y SUMMIT 2018**  
**INSURANCE COMMITTEE – FINAL PERSPECTIVES**

**Introduction**

After a series of deliberations, the G-20Y Summit 2018 Insurance Committee concluded that there is industry-wide awareness and acknowledgement of the various disrupting factors affecting insurance. However speed of action amongst traditional insurers, regulators and governments is a source of increasing concern. Legacy thinking, process and systems are amongst some of the major inhibitors in pivoting current mode of operations into the new world.

SHARED NARRATIVES GIVE DECISION MAKERS THE COURAGE TO ACT IN THE FACE OF UNCERTAINTY - AND GIVE PEOPLE THE CONFIDENCE TO BELIEVE IN THESE DECISIONS - *Richard Baldwin: The Great Convergence*

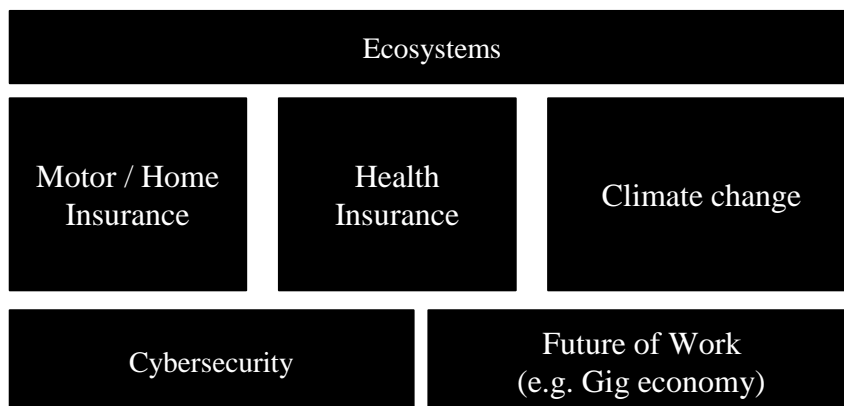
In order to arrive at an industry-wide shared narrative, we honed down on the following macro-trends needing attention and action.

**Macro Trends**

1. Mass personalization and data exploitation: Risk pools narrowing due to scaled technology adoptions (genomics, diagnostics, IoT, social media)
2. Increased risk of financial exclusion for higher risk consumers
3. Longevity and aging population propelling health systems to the brink of failure
4. High probability of technology eliminating the motor insurance industry in its current form
5. Boundaries are blurring between industries due to marketplace models (e.g. Amazon) requiring horizontal rather than vertical regulation (i.e. cross sectorial regulation along products, services and geographies)
6. Changing nature of work e.g. gig economy / contingent workers

**Strong headwinds**

We are observing strong headwinds in the following areas



Area	Present/Emerging Trends	Implications
<b>Ecosystems</b>	<ul style="list-style-type: none"> <li>• <b>Seven of the ten largest companies</b> by Market Cap are ecosystem players (Alibaba, Alphabet, Amazon, Apple, Facebook, Microsoft, Tencent)</li> <li>• <b>30%</b> - the percent of global revenues that will be accounted for by Ecosystems by 2025 (<i>McKinsey</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced consumer offerings due to greater value added services, lower costs and convenience</li> <li>• ‘Winner takes it all’ – can lead to monopolies</li> <li>• Value propositions being delivered in ecosystems may make some or most of the insurance propositions redundant</li> <li>• Insurance companies need to position themselves within the ecosystem</li> </ul>



		<ul style="list-style-type: none"> <li>• Differing regulatory standards for traditional insurance companies and ecosystem players, thus making insurers less competitive</li> <li>• Consumer protections are diminished as no legal jurisdiction (e.g. dispute resolution)</li> </ul>
<p><b>Motor / Home Insurance</b></p>	<ul style="list-style-type: none"> <li>• <b>2024</b> – the year by which ownership-to-access (on-demand/car sharing) will become predominant</li> <li>• <b>44%</b> - the portion of current premium income from Motor Insurance (<i>McKinsey</i>)</li> <li>• <b>70%</b> - the amount by which the auto insurance market will shrink by 2050 (<i>KPMG</i>)</li> <li>• <b>90%</b> - the potential reduction in traffic fatalities by 2050 due to AV's and ADA's (<i>McKinsey</i>)</li> <li>• <b>\$25Bn</b> – the predicted loss for insurers by 2035 on account of drop in individual premiums – safer vehicles and decrease in private ownership (<i>HBR</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Motor insurance will cease to exist in its present form</li> <li>• Current cross subsidization from motor insurance premiums to other portfolios (e.g. property) will cease to be viable</li> <li>• New insurance products required to address the changing risk for property insurance (e.g. Airbnb, cyber risk)</li> <li>• Macro economically - a significant degradation in investment portfolio and potentially reduction in real-estate prices</li> </ul>
<p><b>Health Insurance</b></p>	<ul style="list-style-type: none"> <li>• <b>3X or 425m</b> - the projected number of people aged 80+ (<i>UN report 2017</i>)</li> <li>• <b>95% vs. 87%</b> - the accuracy of AI vs Dermatologists in predicting skin cancer (<i>the guardian</i>)</li> <li>• <b>10X of inflation</b> – the rate of growth in drug pricing (<i>US Senate Committee on hsgac</i>)</li> <li>• <b>15% of GDP</b> – the estimated healthcare protection gap in India (<i>Geneva assoc.</i>)</li> <li>• <b>50%</b> - the percentage of global population denied healthcare (<i>The World Bank</i>)</li> <li>• <b>100M</b> – the number of people pushed into poverty due to uninsured health expenses (<i>The World Bank</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• As health insurance becomes unaffordable, governments may have to intervene through subsidies and policies</li> <li>• Insurance companies may be left with the highest risks while tech companies can do positive selection leaving incumbents with lower quality risk pools</li> <li>• Genomics and diagnostics may enable customers to make advantageous selection / cherry-picking coverage, therefore breaking the foundations of the insurance industry i.e. risk pooling</li> </ul>
<p><b>Climate Change</b></p>	<ul style="list-style-type: none"> <li>• <b>\$700Bn annually</b> – estimated climate change costs to the global economy by 2030 (<i>Climate Vulnerability Monitor</i>)</li> <li>• <b>\$300Bn</b> – economic losses in 2017 from weather-climate disasters (<i>Forbes</i>)</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Increased volatility, amplified risk making it unsustainable for insurance companies</li> <li>• Climate change making insurance unaffordable for consumers</li> <li>• Direct links between financial/social inclusion and negative impact on the economy</li> </ul>
<p><b>Cybersecurity</b></p>	<ul style="list-style-type: none"> <li>• <b>20Bn</b> – the number of connected things (IoT) by 2020 providing potential point of entry for cyber criminals – not only to personal data but also public services (<i>Gartner</i>)</li> <li>• <b>\$1.5 Tn</b> –the estimated profits from Cybercrime (<i>Bromium/Dr. Michael McGuire</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of systemic failure is significant and real (e.g. hundreds of car crashes at once) – systemic financial and societal risk</li> <li>• Lack of adequate cyber-insurance coverage as the industry is unable to price risk</li> </ul>
<p><b>Future Work</b></p>	<ul style="list-style-type: none"> <li>• Upto 1/3<sup>rd</sup> of the working age population in the US and Europe engage in the Gig-</li> </ul>	<ul style="list-style-type: none"> <li>• Our systems are not setup to handle unpredictable nature of income in the gig economy</li> </ul>

	economy ( <i>McKinsey</i> ). Trend likely to increase	<ul style="list-style-type: none"> <li>• Gap in retirement benefits for Gig workers/contingent workforce</li> <li>• Insurance industry will need to significantly upskill the workforce</li> </ul>
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**THE GREAT RESET**

We face the task of understanding and governing 21st-century technologies with a 20th-century mindset and 19th-century institutions - *Klaus Schwab: Shaping the Fourth Industrial Revolution*

**Recommendations**

1. There is an urgent need for dialogue across the industry, society and regulators along all these dimensions with focus on one exam question – “how do we prepare the industry to adapt to the technology disruption”.
  - a. Some, if not all, of the structures will have to be reimagined (e.g. management, policy, regulatory frameworks, business models, operating models including workforce skill-base and governance)
  - b. Industry collaboration and sharing common platforms to address systemic issues impacting insurance (e.g. claims clearing house, healthcare ecosystem). Removal of friction for customers should be at the core of the industry to prevent insurers being disintermediated.
2. Strengthen consumer protection across all distribution channels regardless of industry i.e. level playing field (consumer protection and prudential)
  - a. A regulatory sand-box environment to enable traditional companies to experiment without affecting structural aspects of the economy
  - b. Implement horizontal regulation of products as opposed to the current industry specific siloed regulatory framework (i.e. cross industry product and service specific regulation)
3. Structured review of the needs of the Gig economy and regulations to enable adequate coverage for contingent workers e.g. Open insurance with the ability for each participant/contingent worker to take their individual history with them across jobs and still be covered
4. Strong focus on talent attraction and talent management to support evolving operating models and disruption
5. Regular dialogue between governments and insurers understanding roles and responsibilities around risk mitigation

## **G-20Y SUMMIT 2018**

### **EMERGING TECHNOLOGIES COMMITTEE – FINAL PERSPECTIVES**

Emerging technologies such as artificial intelligence, big data and sensors are transforming all industries at an unprecedented pace and depth. On the one hand they will present opportunities such as transforming existing business models, and on the other create market threatening challenges that could put existing businesses at risk of survival.

AI and the advancement of data analytics for example will allow businesses to create major efficiencies at an organization level, and customer centric solutions at a current product level. The same technologies will also create new markets, new customer demands and in turn disrupt current product offerings and business models.

It is therefore required to split the impact into two themes of digitization and reimagination, both of which are essential for the ongoing success of incumbent companies.

At a digitization level, big data analytics helps organizations harness their data and use it to identify new opportunities, reduce costs, make faster, better decisions and be more responsive to adapting to customer needs and preferences. This is essential to meet customer expectations and behaviors in the current landscape.

At a reimagination level, machine to machine connectivity and sensor developments are creating whole new industries and solutions. An insurer can now very easily compete with an auto-manufacturer or chip provider in the move to autonomous vehicles (AV). The same market trend can make existing product solutions redundant in the new future.

The key challenge for an incumbent is balancing these two requirements, and to know when and where to change. For example, the insurer needs to digitize its current car insurance offering, but at the same time keep in mind the move from human to cyber insurance, or the move from permanent to on demand terms. Knowing when to adapt to the latter and how long to deploy the former will be key in the cycle.

It should be raised that the incumbent will be operating with increasing market and organization challenges.

At a market level, technology developments are moving faster than regulatory frameworks. These are leading to either policy gaps or restrictive policies that may not be in the interest of business innovation or societal development. Multinational organizations will be therefore be required to play a bigger role in such developments.

At an organization level, incumbent players face lagging skill sets, culture and adaptability to the digital market. Whilst many appear to be on the digitization journey, there remains a gap in digital curiosity allowing for reimagination. As both business and social responsibility, upskilling or redeploying talent which make a shift in culture will be essential.

To embrace the opportunities and defend the risks, the multi-disciplinary team came up with following frameworks and recommendations:

#### **Market trends**

1. We are operating on a cross industry level. Companies need to work both with existing and emerging competitors to co-create solution.
2. Continuously explore landscape of new digital disruptors and know when to buy and when to build. Generate pipeline of possible M&A or minority investment options and execute to participate in new business models/emerging digital technologies.

### **Culture and People**

3. Challenge culture via constructive debate over Digitization between the teams, peers, management and Board. For example, including digital natives as part of boards and senior management who are truly empowered to challenge business and team decisions.
4. Encourage an environment where Digitization is at the front and center of new ideas / new product development.
5. Deploy capital towards upskilling teams to be prepared for new forms of working and use of digital technology for product development or services.

### **Organization**

6. Create a framework to allow task forces to try, fail fast and change instead of applying existing strict KPIs and controls. Create cross functional teams to work in a “scrum” fashion to iterate at pace, to drive customer centric solutions by including them in the process and adapt fast.
7. Initiate “Digital Stress Test” to assess and prepare for digital disruption within your sector. For example, a team dedicated to monitoring market movements and perform risk assessments across the current products and services to make necessary recommendations.
8. Companies need to look at the pace of the technological development with a “Growth Mindset”, aiding the digitization process, and allow for reimagination. This should be coupled with establishing “Digital Metrics” to measure and accelerate digital agenda within the company to remain business focused.

### **Policy & Regulations**

9. Advocate and influence regulators to develop and deliver well-balanced legislation between customer interest and business innovation.



## **G-20Y SUMMIT 2018**

### **FUTURE OF JOBS COMMITTEE – FINAL PERSPECTIVES**

Work, the meeting of human endeavor and capital, remains foundational to global societies. Work powers new investment, opportunities and economic growth but also gives individuals meaning and purpose in their lives. The right job can address all of Maslow's hierarchical needs.

The future of work (and jobs) must therefore be a future that is inclusive to all. People feel included when they are valued for who they are, when they are being treated fairly, when they can be themselves, their best selves.

Historically, the nature of work has been shaped by changes in technology. Movements from agrarian to industrial to post-industrial society have seen radical changes in the way in which society organizes. This has transformed how we structure companies and work into jobs successfully. Working population grows by 2% every year and yet there are sufficient jobs for everyone, higher salaries and quality of life.

Global society is now facing a tipping point with emerging technologies. The scale (94% of the jobs will be affected), size (50% of all the jobs will be replaced), speed (diffusion of technologies will be 2X faster), and quality (change to higher cognitive order) will be the new normal.

Our education systems and business practices and models will need to be adapted given the nature of challenge above. Dramatic skills shortages are already being faced by industry today even though adoption rates of new technology only stand at 4%. Traditional Hire Fire and Acquire strategies will not be sufficient to address the skills gap. To meet this challenge, our workforce will need to be reskilled and our corporations transformed through 4 key organizing principles.

- Lifelong Learning (soft skills & technology)
- Strategic HR as an orchestrator of this change
- Inclusive Ecosystem (Gig economy and Gender integration)
- Organizational agility (Fail fast, Innovate, Human centric)

#### **Example 1: Lifelong Learning**

1. While corporations continue to look for specific skills to meet their immediate needs, there is increased demand for workers who are capable of developing new skills and abilities (eg new collar workers). These workers will need a growth mindset to develop these skills and a continuous learning appetite to ensure that they can continue to grow and evolve as the demands of work change.
2. This increased demand can first be addressed by reforms in the way we prepare people for work in our education system. In our schools, new approaches to encourage a passion for learning will need to be developed. Learning which allows for students to experience the key work skills of collaboration, teamwork and communication should be pursued. Technology such as Virtual Reality (VR) and Artificial Intelligence (AI) can help ensure that competencies can be accurately assessed and additional specific assistance provided.
3. Governments should also play a leading role, alongside corporations, in developing long term workforce strategies that include the provision of careers advice to guide students' understanding and focus.
4. Additionally, corporations need to be better engaged in the development of curriculum to ensure alignment between what is taught in schools and what is valued by employers. While improvements to the education system are encouraged, the rate at which schools, universities and technical colleges are producing new entrants into the labour market is well below the overall demand for new skills. Now

more than ever corporations need to look internally to invest and re-skill their workforce.

5. In order to drive sustained change at scale, skill attainment and development needs to be central to the culture and values of corporations. This commitment can be demonstrated through a specific time or monetary allotment to support learning and development. As ever, leaders will need to lead by example.
6. Emerging technologies (such as AI and VR) can play critical roles in accelerating the learning process. Multi-faceted digital learning and training strategies will need to be developed. These include leveraging different educational approaches for example the self directed learning of the Montessori tradition, gamification strategies and mass online open courses (MOOCs).

### **Example 2: Driving Inclusion in the workplace**

1. From the perspective of the corporation, the business case for Diversity & Inclusion has been well established in terms of the impact on not just the talent (or skills) supply but also in terms of customers' outcomes, innovation, reputation, brand and financial performance.
2. With increasing demands for soft skills, emerging technologies and digitization will need to play a critical role in enabling the inclusion of individuals currently excluded from the workforce to identify more workers capable of meeting these demands. Examples include:
  - Robots who can read for visually impaired people
  - Mobile translation services for non native speakers
  - Robots who can complement physical activities
  - Machine learning to remove unconscious bias during talent selection
3. Technologies can also facilitate the identification of new sources of key skills by backfilling current roles (currently outside of the workforce eg home carers) or by bringing different skills into the workforce. For example, consider the role of Danish social innovator Specialisterne Foundation in using the characteristics of (1 million) people with Autism Spectrum Disorder (ASD) to provide services such as software testing and quality control in a working environment conducive to employees with ASD.
4. With technology driving these innovations, corporations (as well as small to medium enterprises) will be able to embrace inclusion through platforms at low cost and at scale.

### **Conclusion**

Fears that emerging technologies will significantly change and disrupt jobs are not unfounded. The impact of emerging technologies and digitization in the workplace however extends well beyond automation to gain efficiencies. Technology is key to driving complementarity whereby machines enhance human productivity and build new innovative products and services. This enables corporations to grow and create jobs. By contrast, resistance to technology, will make job losses inevitable and put the long term survival of corporations at risk.

The winners will be those companies who are change agile, who best utilize technology to innovate and whose workers are constantly learning in an inclusive environment.